

## WHAT IS CLAIMED IS:

1. A wireless computer system comprising:
  - a base storage and control system including:
    - an arrangement for receiving and using an input signal in real-time, the input signal being for use in interacting with an application program being executable at the base storage and control system,
    - an arrangement for providing non-volatile storage of information,
  - 10 an arrangement for providing a display output signal based on the input signal and execution of the application program, and
  - 15 an arrangement for wirelessly receiving the input signal and for wirelessly communicating the display output signal in real-time;
  - at least one portable input-output system for use with the base storage and control system, the portable input-output system including:
    - an arrangement for wirelessly communicating the input signal to the base storage and control system and for wirelessly receiving the display output signal from the base storage and control system in real-time,
    - 20 an arrangement for inputting an information item and for generating the input signal corresponding to the

information item, the input signal being wirelessly  
communicable in real-time to the base storage and control  
system for use in providing interactive and real-time  
operation of the application program being executable at the  
5 base storage and control system, and  
  
an arrangement for providing a full screen display  
by directly using the display output signal to generate a  
portion of the full screen display corresponding to the  
display output signal;

10 wherein the application program is operable in real-time  
in the base storage and control system in essentially the same  
way that the application program is operable in a computer  
having a display and a keyboard, the display and the keyboard  
being coupled by wires to the computer.

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2. The wireless computer system of claim 1, wherein at  
least one of a radio frequency signal and an electromagnetic  
frequency signal is used as a communication signal, the  
communication signal containing at least one of the input  
20 signal and the output display signal and being communicable by  
at least one of the arrangement for wirelessly receiving the  
input signal and for wirelessly communicating the display  
output signal and the arrangement for wirelessly communicating

the input signal to the base storage and control system and for wirelessly receiving the display output signal.

3. The wireless computer system of claim 2, wherein:

5 the communication signal has a wavelength longer than an infrared signal wavelength, and

the communication signal includes at least one of a modulated signal, an amplitude modulated signal, a frequency modulated signal, and a spread spectrum modulated signal.

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4. The wireless computer system of claim 1, wherein the output display signal includes at least one of a video signal, a video synchronizing signal, a horizontal video synchronizing signal, a vertical video synchronizing signal, a composite video signal, a video and synchronizing signal, and an RGB signal.

5. The wireless computer system of claim 1, wherein the input signal is a keyboard signal.

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6. The wireless computer system of claim 1, wherein: the input signal is a keyboard signal and the output display signal includes at least one of a video signal, a video synchronizing signal, a horizontal video synchronizing

signal, a vertical video synchronizing signal, a composite video signal, a video and synchronizing signal, and an RGB signal.

5       7. The wireless computer system of claim 1, wherein at least the input signal is an asynchronous signal.

8. The wireless computer system of claim 1, wherein at least one of the arrangement for wirelessly receiving the  
10 input signal and for wirelessly communicating the display output signal and the arrangement for wirelessly communicating the input signal to the base storage and control system and for wirelessly receiving the display output signal includes:

an antenna;  
15       an arrangement for demodulating a communicated signal corresponding to at least one of the input signal and the output display signal; and  
            an arrangement for modulating at least one of the input signal and the output display signal.

20       9. The wireless computer system of claim 8, wherein at least one of the arrangement for wirelessly receiving the input signal and for wirelessly communicating the display output signal and the arrangement for wirelessly communicating

the input signal to the base storage and control system and  
for wirelessly receiving the display output signal includes: a  
directional coupler, the directional coupler being coupled to  
the antenna, the arrangement for demodulating and the  
5 arrangement for modulating.

10. The wireless computer system of claim 1, wherein at  
least one of the arrangement for wirelessly receiving the  
input signal and for wirelessly communicating the display  
10 output signal and the arrangement for wirelessly communicating  
the input signal to the base storage and control system and  
for wirelessly receiving the display output signal includes:  
an arrangement for communicating at least one of the  
input signal and the output signal omnidirectionally.  
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11. The wireless computer system of claim 1, wherein at  
least one of the arrangement for wirelessly receiving the  
input signal and for wirelessly communicating the display  
output signal and the arrangement for wirelessly communicating  
20 the input signal to the base storage and control system and  
for wirelessly receiving the display output signal includes a  
transceiver.

12. The wireless computer system of claim 1, wherein the base storage and control system includes a microprocessor.

13. The wireless computer system of claim 1, wherein one  
5 of the at least one portable input-output system includes a microcontroller coupled to the arrangement for inputting an information item.

14. The wireless computer system of claim 1, wherein:  
10 the base storage and control system includes a microprocessor; and

one of the at least one portable input-output system includes a microcontroller coupled to the arrangement for inputting an information item.

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15. The wireless computer system of claim 1, wherein the arrangement for wirelessly receiving the input signal and for wirelessly communicating the display output signal is housed in a housing and the base storage and control system, except  
20 for the arrangement for wirelessly receiving, is housed in another housing, the housing and the another housing being electrically coupled.

16. The wireless computer system of claim 1, wherein:

the base storage and control system includes an interface arrangement for receiving graphics information being generated by executing the application program and for providing the graphics information to the at least one portable input-output by using the arrangement for wirelessly communicating the display output signal; and

the at least one portable input-output includes another interface arrangement for providing the graphics information to the arrangement for providing a full screen display.

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17. The wireless computer system of claim 16, wherein for an existing full screen display at the at least one portable input-output, the base storage and control system provides new graphics information for a changed portion of the existing full screen display.

18. The wireless computer system of claim 1, wherein:

the at least one portable input-out system is a plurality of portable input-output systems; and

20 the base storage and control system is operable for establishing a priority of communication among the plurality of portable input-output systems with the base storage and control system.

19. The wireless computer system of claim 1, wherein one of the at least one portable input-output includes a keyboard and a video display monitor.

5 20. The wireless computer system of claim 1, wherein the arrangement for providing non-volatile storage of information includes at least one of a disk drive and a CD-ROM.

10 21. A wireless computer system comprising:

a base storage and control system including:

means for receiving and using an input signal in real-time, the input signal being for use in interacting with an application program being executable at the base storage and control system,

15 means for providing non-volatile storage of information,

means for providing a display output signal based on the input signal and execution of the application program, and

20 means for wirelessly receiving the input signal and for wirelessly communicating the display output signal in real-time;

at least one portable input-output system for use with the base storage and control system, the portable input-output system including:

means for wirelessly communicating the input signal to the base storage and control system and for wirelessly receiving the display output signal from the base storage and control system in real-time,

5 means for inputting an information item and for generating the input signal corresponding to the information item, the input signal being wirelessly communicable in real-time to the base storage and control system for use in providing interactive and real-time operation of the  
10 application program being executable at the base storage and control system, and

means for providing a full screen display by directly using the display output signal to generate a portion of the full screen display corresponding to the display output  
15 signal;

wherein the application program is operable in real-time in the base storage and control system in essentially the same way that the application program is operable in a computer having a display and a keyboard, the display and the keyboard  
20 being coupled by wires to the computer.

22. A base storage and control system for use in a wireless computer system and for use with at least one portable input-output system for use with the base storage and

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control system, the portable input-output system including an arrangement for wirelessly communicating the input signal to the base storage and control system and for wirelessly receiving a display output signal from the base storage and 5 control system in real-time, an arrangement for inputting an information item and for generating the input signal corresponding to the information item, the input signal being wirelessly communicable in real-time to the base storage and control system for use in providing interactive and real-time 10 operation of an application program being executable at the base storage and control system, and an arrangement for providing a full screen display by directly using the display output signal to generate a portion of a full screen display corresponding to the display output signal, the base storage 15 and control system comprising:

an arrangement for receiving and using the input signal in real-time, the input signal being for use in interacting with an application program being executable at the base storage and control system;

20 an arrangement for providing non-volatile storage of information;

an arrangement for providing the display output signal based on the input signal and execution of the application program; and

an arrangement for wirelessly receiving the input signal and for wirelessly communicating the display output signal in real-time;

wherein the application program is operable in real-time  
5 in the base storage and control system in essentially the same way that the application program is operable in a computer having a display and a keyboard, the display and the keyboard being coupled by wires to the computer.

10 23. A portable input-output system for use in a wireless computer system with a base storage and control system, the base storage and control system including an arrangement for receiving and using an input signal in real-time, the input signal being for use in interacting with an application  
15 program being executable at the base storage and control system, an arrangement for providing non-volatile storage of information, an arrangement for providing a display output signal based on the input signal and execution of the application program, and an arrangement for wirelessly receiving the input signal and for wirelessly communicating  
20 the display output signal in real-time, wherein the application program is operable in real-time in the base storage and control system in essentially the same way that the application program is operable in a computer having a

display and a keyboard, the display and the keyboard being coupled by wires to the computer, the portable input-output system including:

- an arrangement for wirelessly communicating the input signal to the base storage and control system and for wirelessly receiving the display output signal from the base storage and control system in real-time;
- an arrangement for inputting an information item and for generating the input signal corresponding to the information item, the input signal being wirelessly communicable in real-time to the base storage and control system for use in providing interactive and real-time operation of the application program being executable at the base storage and control system; and
- an arrangement for providing a full screen display by directly using the display output signal to generate a portion of the full screen display corresponding to the display output signal.